TRICARE Northeast

Status of Cancer in TRICARE Region 1

COL Nelson & LCDR Baker
TRICARE Lead Agent Office
21 May 2002

TRICARE Northeast

Status of Cancer in TRICARE Northeast

- **Objectives**
  - Illustrate the state of cancer in MHS & Region 1 using specified data sources
  - Describe demographics, clinical treatments, & cost of cancer in Region 1
  - Discuss key findings per MTF in Region 1
  - Brainstorm clinical, business, and cost optimization opportunities for Region 1

TRICARE Northeast

Status of Cancer in TRICARE Northeast

Ground-Rules: Data Descriptors

- Findings based on FY00 data, prior to TFL
- Data reflects all patients treated &/or evaluated for neoplastic conditions in FY00
- Addresses neoplastic ICD-9- CM Codes

  140 – 239, and V58.1
- Neoplastic data mart created via FY00, ICD-9 from 4 MHS data sources

TRICARE Northeast

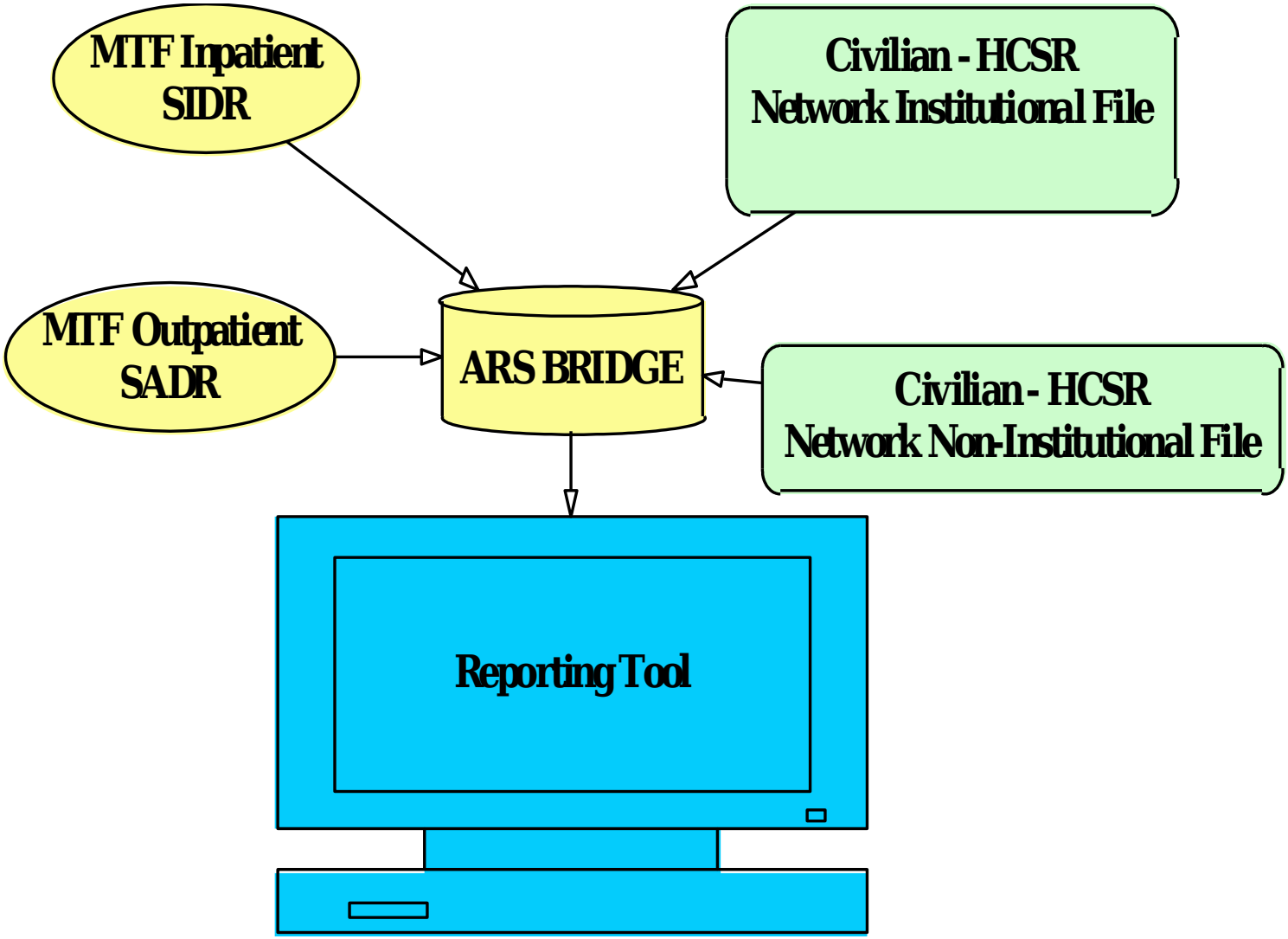
Status of Cancer in TRICARE Northeast

Ground-Rules: Data Descriptors

- Data sources contain all MHS beneficiaries
- Each data view is a manipulation of 4 variables
  - Patient Enrollment Status
  - Treatment location
  - Beneficiary Zip Code
  - Enrollment Status

TRICARE Northeast

Data Sources



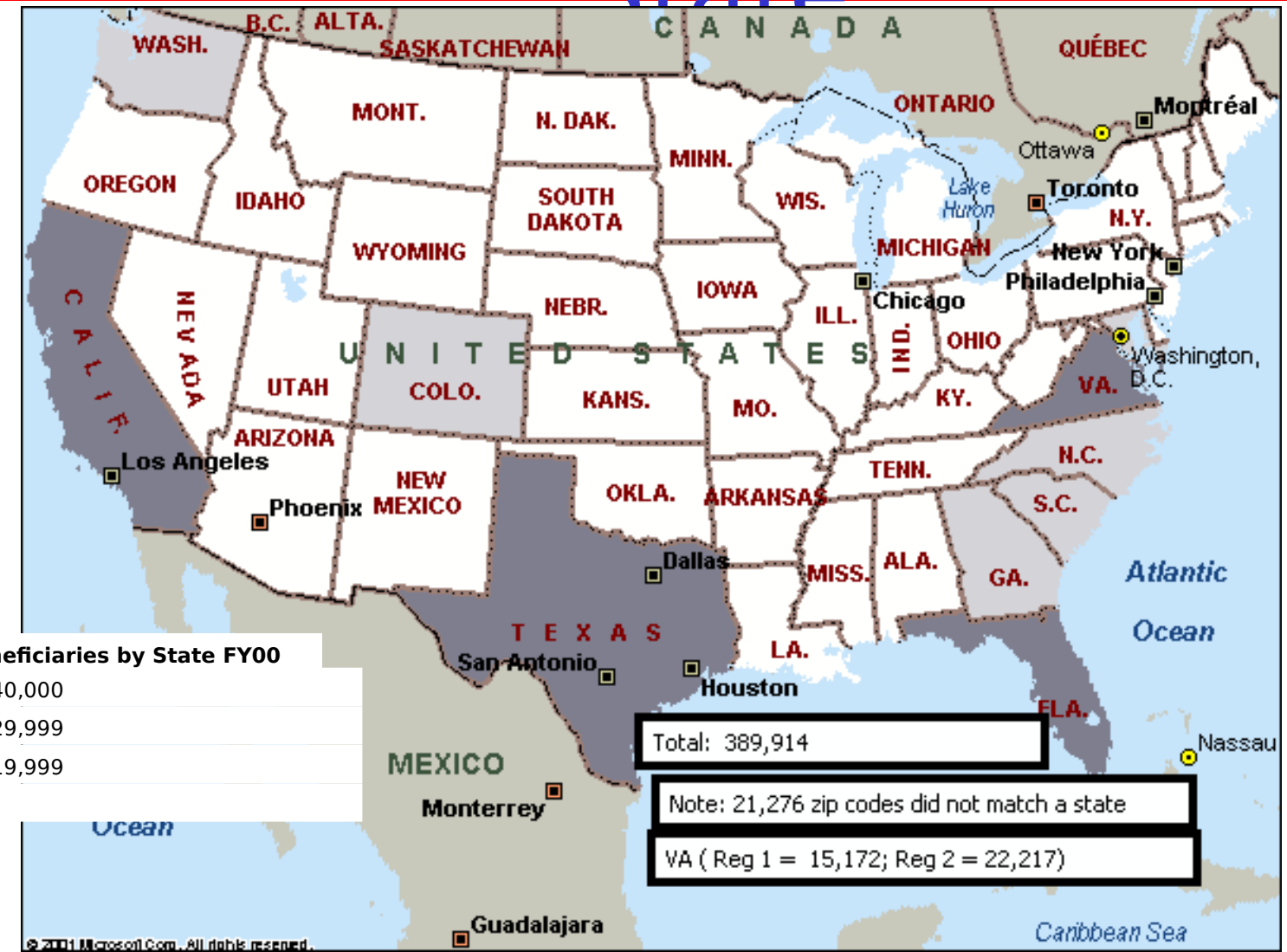
TRICARE Northeast

Status of Cancer High-level Overview

- Neoplastic beneficiaries by state
  - High-end states are VA, TX, CA, FL
  - Next highest states are: NC, SC, GA, DC
- Neoplastic Expenditures by Region
  - Highest = Region 6, @ $73,004,168
  - Next highest = Region 1, @ $69,581,621

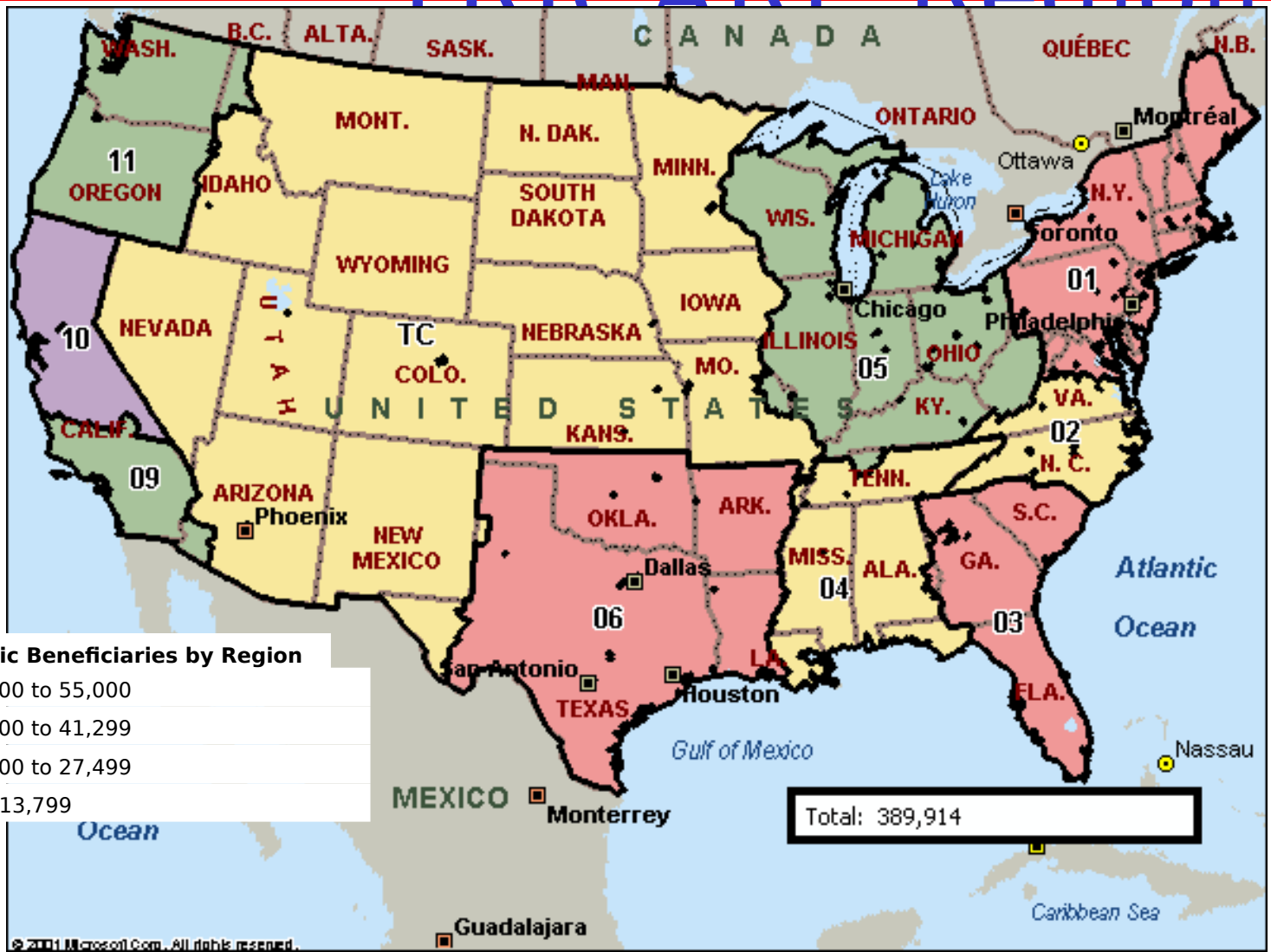
TRICARE Northeast

Neoplastic Beneficiaries by State



TRICARE Northeast

Neoplastic Beneficiaries by TRICARE Region



TRICARE Northeast

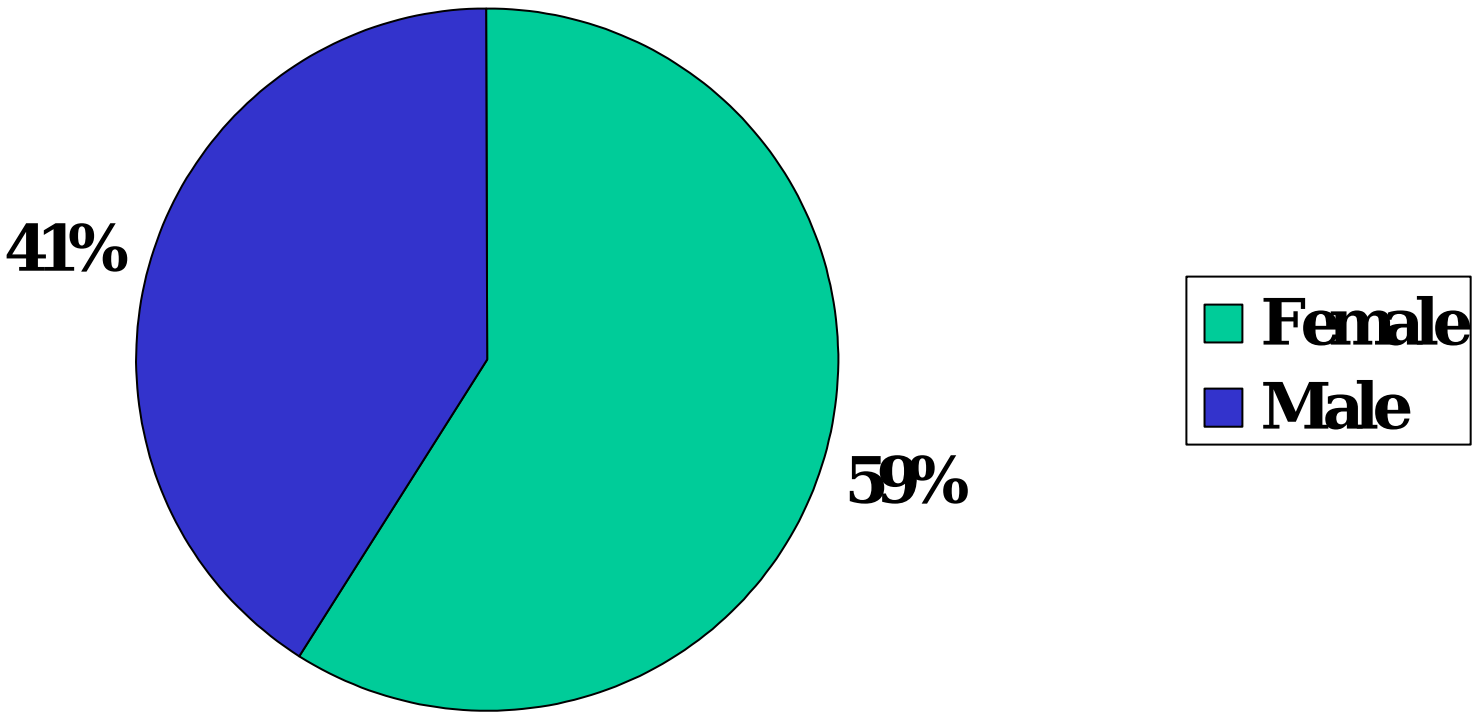
Region 1 Overview
Cancer Patients & Expenditures

- Beneficiaries treated in Region 1
  - 59% Female
  - 41% Male
- Age/gender plot
  - Spikes @ age 65 for both male & female
  - Female higher than males ages 15 thru 65
  - Males higher than females ages 65 thru 90

TRICARE Northeast

Regional Overview

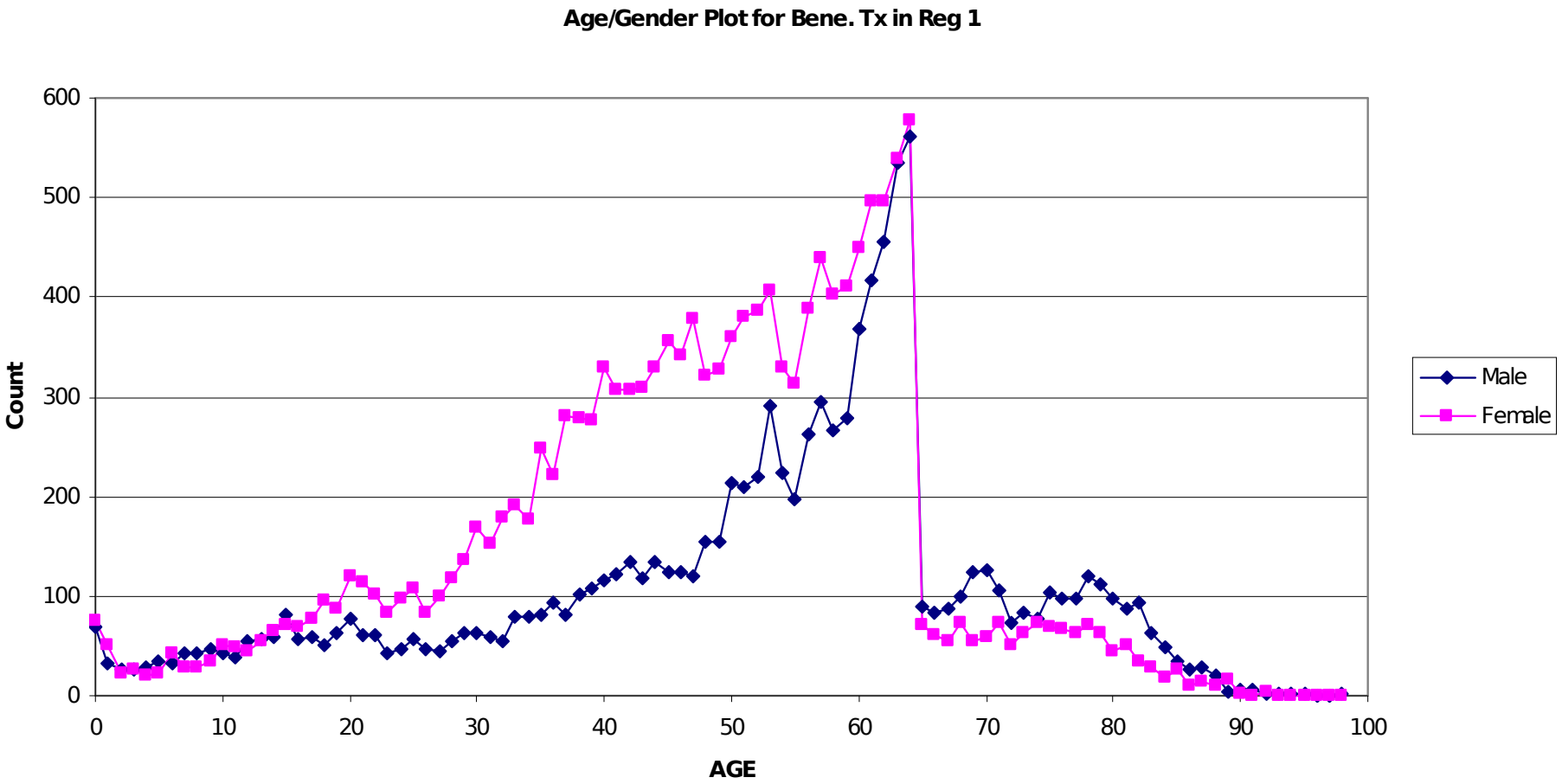
All Beneficiaries w/ Neoplastic Conditions



TRICARE Northeast

Regional Overview

All Beneficiaries w/ Neoplastic Conditions



TRICARE Northeast

Region 1 Overview
Cancer Patients & Expenditures

FY 00 Expenditures

- MTF Inpatient = $27.5 M
- MTF Outpatient = $21.1 M
- Civilian Inpatient = $21.6 M
- Civilian Outpatient* = $10.7 M
- Total : $81 M

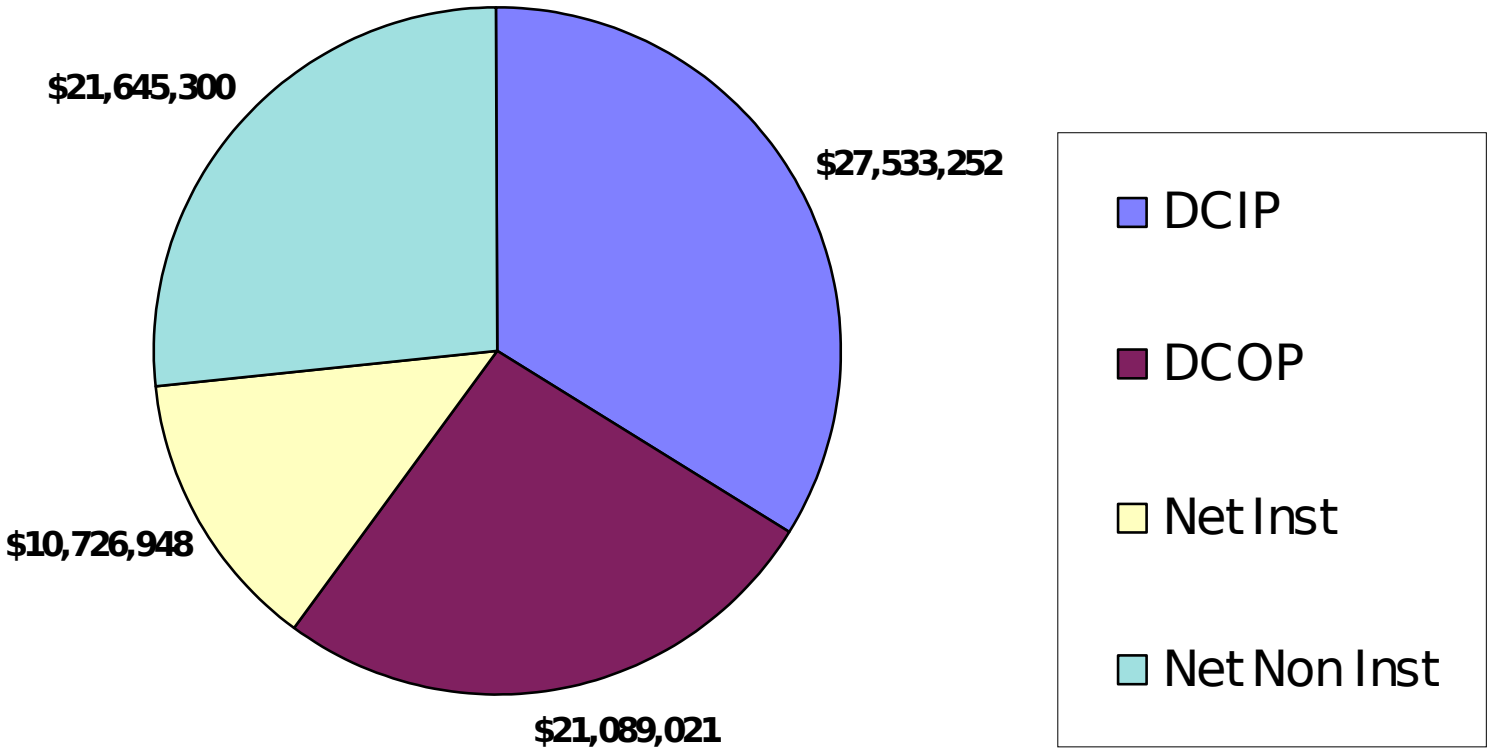
*Includes provider portion of inpatient
Sums are rounded

TRICARE Northeast

Regional Overview

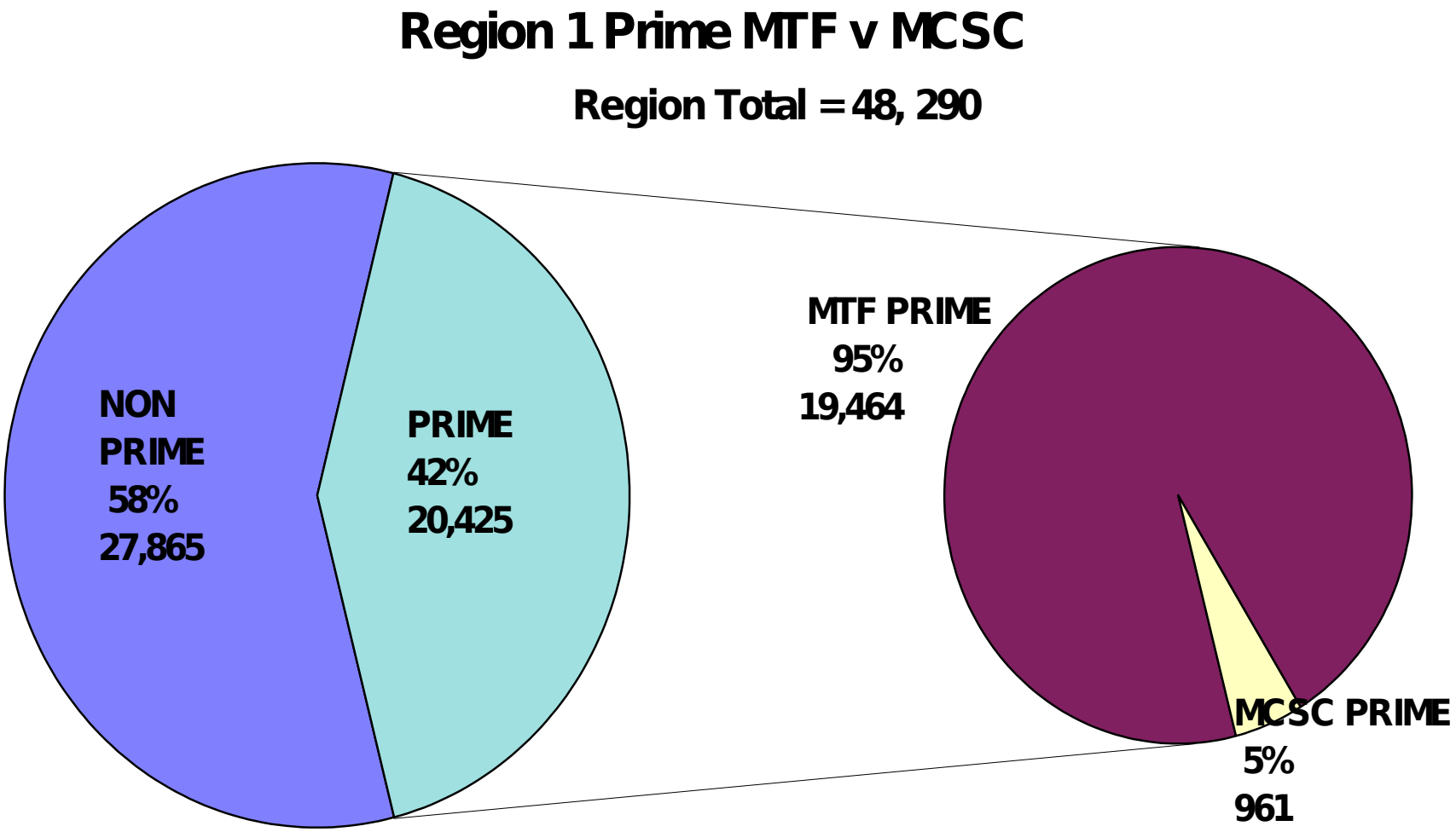
All Beneficiaries w/ Neoplastic Conditions

Expenditures for All MHS Eligibles Treated in Region 1
Total Expenditures for FY00 =
$80,994,521



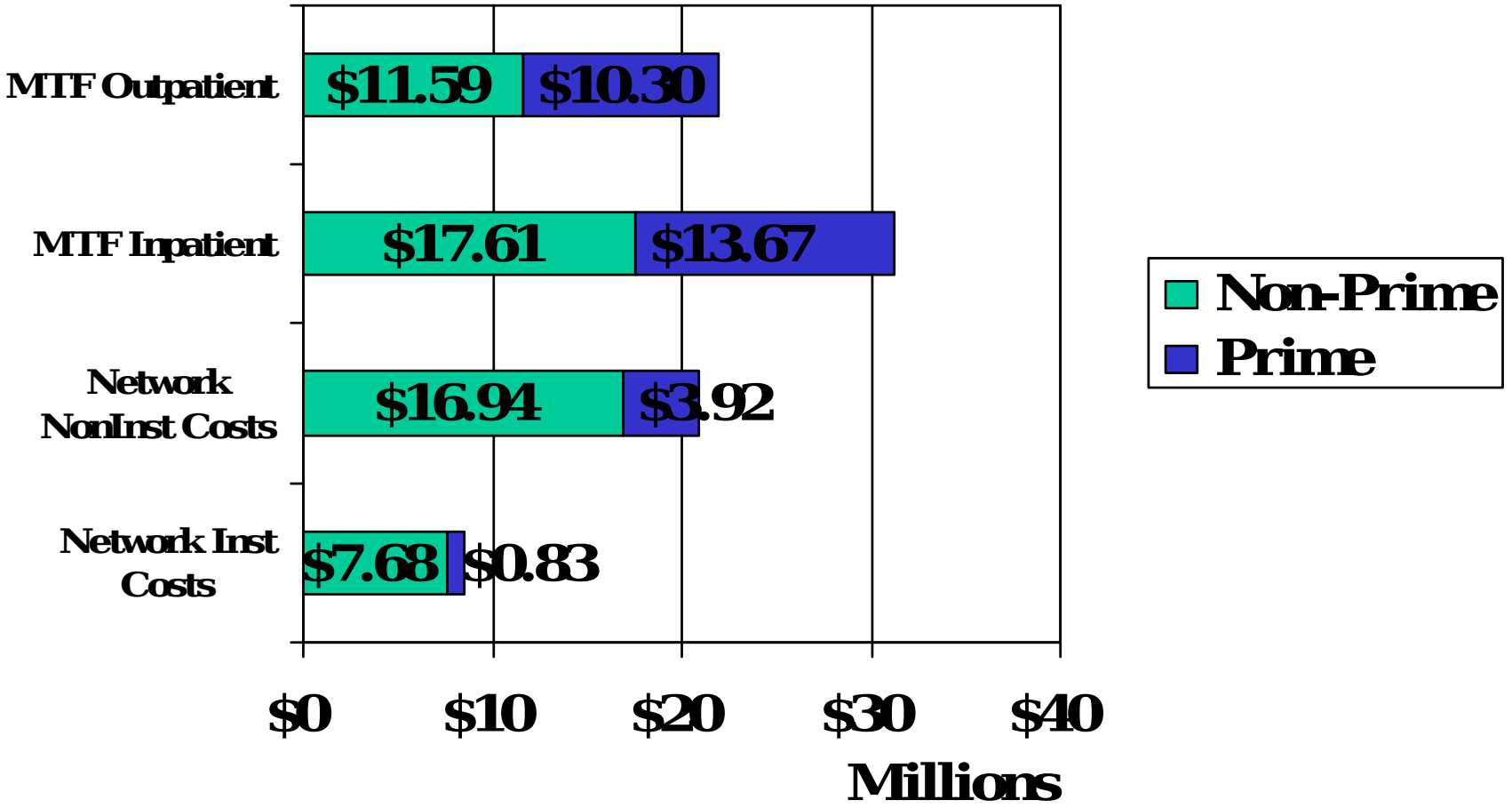
TRICARE Northeast

Regional Overview
Neoplastic Conditions



TRICARE Northeast

Regional Overview
Neoplastic Conditions

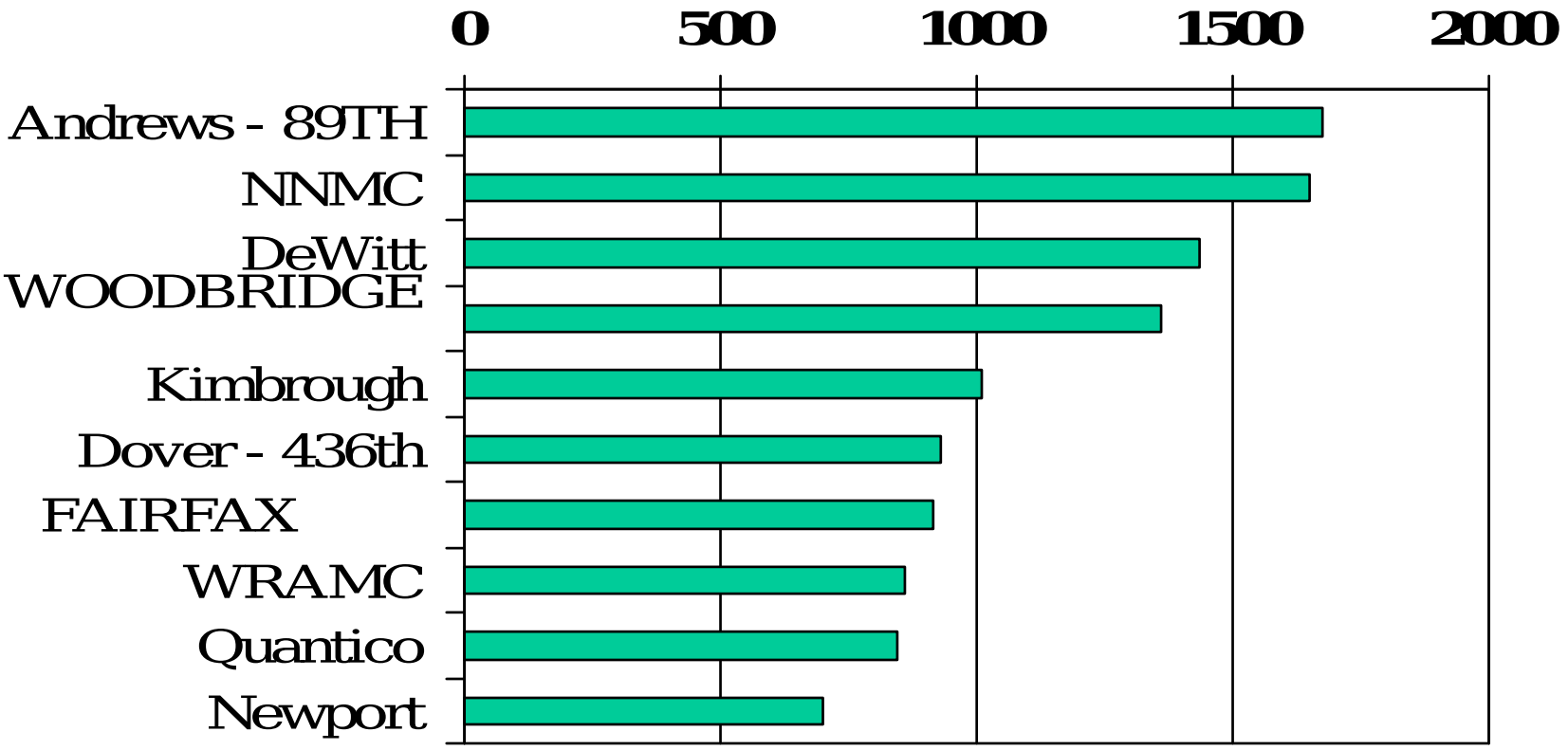


Total FY00 Expenditures: $81 Million

TRICARE Northeast

Regional Overview

Prime Neoplastic Population: Top 10



TRICARE Northeast

Regional Overview

MTF PRIME w/ Neoplastic Disease

MTF OVERVIEW		Utilization	Costs
	a. Total MTF Prime w/ Neoplastic Disease	18,550	
	b. Total MTF Outpatient Visits (all Dx) for these pts:	43,548	
	c. Total MTF Outpatient Expenditures (all Dx) for these pts:		$ 10,304,260
	d. Total MTF Inpatient Admissions (all Dx) for these pts:	1,663	
	e. Total MTF Inpatient Expenditures (all Dx) for these pts:		$ 13,673,629
	f. Total Civilian Outpatient Visits (all Dx) for these pts:	17,066	
	g. Total Civilian Outpatient Expenditures (all Dx) for these pts:		$ 825,260
	h. Total Civilian Inpatient Admissions (all Dx) for these pts:	475	
	I. Total Civilian Inpatieint Expenditures (all Dx) for these pts:		$ 3,918,619
	Total Expenditures		$ 28,721,768

TRICARE Northeast

Regional Overview

MTF PRIME: MTF Outpatient Visits

j. MTF Outpatient Visits			
Rank	Number	Dx	Description
1	6,243	174	Malignant neoplasm of female breast
2	5,333	216	Benign neoplasm of the skin
3	2,576	185	Malignant neoplasm of prostate
4	2,281	238	Neoplasm of uncertain behavior of other and unspecified sites and tissues
5	1,622	214	Lipoma
6	1,460	173	Other malignant neoplasm of skin
7	1,418	154	Malignant neoplasm of rectum, rectosigmoid junction, and anus
8	1,299	162	Malignant neoplasm of trachea, bronchus, and lung
9	1,248	211	Benign neoplasm of other parts of digestive system
10	1,198	199	Malignant neoplasm without specification of site

TRICARE Northeast

Regional Overview

MTF PRIME: MTF Inpatient Admissions

k. MTF Inpatient Admissions			
Rank	Number	Dx	Description
1	270	218	Uterine leiomyoma
2	121	V581	Chemotherapy
3	103	185	Malignant neoplasm of prostate
4	68	174	Malignant neoplasm of female breast
5	51	193	Malignant neoplasm of thyroid gland
6	46	153	Malignant neoplasm of colon
7	37	197	Secondary malignant neoplasm of respiratory and digestive system
8	36	162	Malignant neoplasm of trachea, bronchus, and lung
9	34	198	Secondary malignant neoplasm of other specified sites
10	21	220	Benign neoplasm of ovary

TRICARE Northeast

Regional Overview

MTF PRIME: Civilian Outpatient Visits

L. Civilian Outpatient Visits			
Rank	Number	Dx	Description
1	2,043	153	Malignant neoplasm of colon
2	1,509	174	Malignant neoplasm of female breast
3	1,275	162	Malignant neoplasm of trachea, bronchus, an
4	981	185	Malignant neoplasm of prostate
5	609	154	Malignant neoplasm of rectum, rectosigmoid j
6	573	V581	Chemotherapy
7	558	239	Neoplasm of unspecified nature
8	536	191	Malignant neoplasm of brain
9	457	171	Malignant neoplasm of connective tissue and
10	410	203	Multiple myeloma and immunoproliferative n

TRICARE Northeast

Regional Overview

MTF PRIME: Civilian Inpatient Admissions

m. Civilian Admissions			
Rank	Number	Dx	Description
1	56	218	Uterine leiomyoma
2	49	V581	Chemotherapy
3	15	198	Secondary malignant neoplasm of other specified sites
4	14	153	Malignant neoplasm of colon
5	11	162	Malignant neoplasm of trachea, bronchus, and lung
6	11	185	Malignant neoplasm of prostate
7	10	191	Malignant neoplasm of brain
8	9	205	Myeloid leukemia
9	8	197	Secondary malignant neoplasm of respiratory and digestive system
10	7	220	Benign neoplasm of ovary

TRICARE Northeast

MTF Prime: MTF Outpatient Expenditures

n. MTF Outpatient Expenditures			
Rank	Number	Dx	Description
1	$1,328,432	174	Malignant neoplasm of female breast
2	$1,121,468	216	Benign neoplasm of the skin
3	$ 762,003	238	Neoplasm of uncertain behavior of other and unspecified sites and tissues
4	$ 502,419	211	Benign neoplasm of other parts of digestive system
5	$ 450,134	173	Other malignant neoplasm of skin
6	$ 423,570	154	Malignant neoplasm of rectum, rectosigmoid junction, and anus
7	$ 333,055	162	Malignant neoplasm of trachea, bronchus, and lung
8	$ 317,165	214	Lipoma
9	$ 297,719	185	Malignant neoplasm of prostate
10	$ 278,947	183	Malignant neoplasm of ovary and other uterine adnexa

TRICARE Northeast

MTF Prime: MTF Inpatient Expenditures

o. MTF Inpatient Expenditures			
Rank	Number	Dx	Description
1	$1,253,925	218	Uterine leiomyoma
2	$ 919,249	V581	Chemotherapy
3	$ 913,814	205	Myeloid leukemia
4	$ 743,311	185	Malignant neoplasm of prostate
5	$ 607,243	153	Malignant neoplasm of colon
6	$ 501,400	197	Secondary malignant neoplasm of respiratory and digestive system
7	$ 443,539	174	Malignant neoplasm of female breast
8	$ 440,194	162	Malignant neoplasm of trachea, bronchus, and lung
9	$ 337,326	225	Benign neoplasm of brain and other parts of nervous system
10	$ 302,376	198	Secondary malignant neoplasm of other specified sites

TRICARE Northeast

MTF Prime: Civilian Outpatient Expenditures

p. Civilian Outpatient Expenditures			
Rank	Number	Dx	Description
1	$ 676,181	205	Myeloid leukemia
2	$ 357,993	202	Other malignant neoplasms of lymphoid and histiocytic tissue
3	$ 327,755	V581	Chemotherapy
4	$ 195,936	218	Uterine leiomyoma
5	$ 174,263	153	Malignant neoplasm of colon
6	$ 164,458	191	Malignant neoplasm of brain
7	$ 151,253	162	Malignant neoplasm of trachea, bronchus, and lung
8	$ 126,948	194	Malignant neoplasm of other endocrine glands and related structure
9	$ 108,997	198	Secondary malignant neoplasm of other specified sites
10	$ 82,719	197	Secondary malignant neoplasm of respiratory and digestive system

TRICARE Northeast

MTF Prime: Civilian Inpatient Expenditures

q. Civilian Inpatient Expenditures			
Rank	Number	Dx	Description
1	$ 88,290	185	Malignant neoplasm of prostate
2	$ 70,918	174	Malignant neoplasm of female breast
3	$ 64,278	162	Malignant neoplasm of trachea, bronchus, and lung
4	$ 60,782	153	Malignant neoplasm of colon
5	$ 36,576	V581	Chemotherapy
6	$ 26,124	191	Malignant neoplasm of brain
7	$ 25,374	171	Malignant neoplasm of connective tissue and other soft tissue
8	$ 24,375	239	Neoplasm of unspecified nature
9	$ 21,810	183	Malignant neoplasm of ovary and other uterine adnexa
10	$ 21,419	202	Other malignant neoplasms of lymphoid and histiocytic tissue

TRICARE Northeast

Review Individual MTFs

Cancer Patients & Expenditures

- Rankings are based on 85 DMIS (MTFs) with at least 1 patient evaluated/treated for a neoplastic condition during FY 00

- Copies available @

http://tricare-northeast.detrick.army.mil

TRICARE Northeast

Brainstorm!!!!

Clinical, Business, and Cost Optimization Opportunities for Region 1

TRICARE Northeast

Status of Cancer in Region 1

Summary & Future Trends

- Impact of Tricare Plus…False sense of security
- Circuit-expert opportunities
- ??

TRICARE Northeast

Status of Cancer in TRICARE Region 1

Backup Slides

TRICARE Northeast

Status of Cancer Data Sources: ARS

- **ARS Bridge**
  - Provides a select view of all MHS corporate data
  - Data quality is a known problem
  - Abstraction is time and labor intensive
  - Blind spots: Ancillary services (pharmacy, laboratory, & radiology)

Back

TRICARE Northeast

Status of Cancer Data Sources: SIDR

- **SIDR**
  - Standard Inpatient Data Record
  - Abstract of CHCS data related to inpatient admissions & dispositions
  - Data quality: High
  - Cost data are best estimate available

Back

Status of Cancer Data Sources: SADR

- **SADR**
  - Standard Ambulatory Data Record
  - Abstract of ADS
  - Provides only detailed clinical level view (ICD-9-CM) of MHS outpatient encounters
  - Data quality: Poor
    - Estimated 80% completion rate
    - No validity/reliability incentive
  - Cost data are best estimate available

Back

TRICARE Northeast

Status of Cancer Data Sources: NI

- **Network Institutional Care File**
  - Abstract of paid HCSRs submitted by civilian institutions
  - Applies only to hospital/institutional charges
  - Detailed clinical information
  - Data quality: High
  - Time lag: Up to 18 months

Back

TRICARE Northeast

Status of Cancer Data Sources: NNI

- **Network Non-Institutional File**
  - Abstract of civilian paid claims for all non-fixed facility care
    - Providers (both inpatient & outpatient charges
    - Home healthcare
    - Network prescriptions
    - DME, ambulance, etc
  - Data quality: High
  - Time lag: Up to 18 months

Back